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10/060,940	01/30/2002	Gregory J. Jackson	SURG:163	8495

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EXAMINER	
NGUYEN, MINH CHAU	

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/060,940	JACKSON ET AL.	
	Examiner	Art Unit	
	MINH-CHAU N. NGUYEN	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-94* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-94* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *07/15/02, 03/22/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3,7-16,18-36,39-42,44-70,73-76,78-94 are rejected under 35 U.S.C. 102(e) as being anticipated by Haggard et al. (Haggard) (6,148,335).

2. Regarding claim 1, Haggard teaches a method of analyzing resource utilization in an information management system comprising a distributed interconnects said method comprising:

monitoring resource utilization information obtained from said information management system across said distributed interconnect (Col. 2, L. 30-44);

logging said monitored resource utilization information (Col. 2, L. 50-60; and Col. 6, L. 5-10; and Col. 7, L. 15-30); and

analyzing said logged resource utilization information (Col. 2, L. 50-60; and Col. 7, L. 21-33).

3. Regarding claim 2, Haggard teaches the method of claim 1, wherein said resource utilization information comprises at least one of memory utilization, CPU utilization, IOPS utilization, or a combination thereof (Col. 8, L. 8-15).

4. Regarding claim 3, Haggard teaches the method of claim 1, wherein said information management system comprises a plurality of individual processing engines coupled together by said distributed interconnect (Col. 5, L. 5-16, L. 34-41, L. 59-Col. 6, L. 6).

5. Regarding claim 7, Haggard teaches the method of claim 3, wherein said information management system comprises a content delivery system (Col. 1, L. 35-65).

6. Regarding claim 8, Haggard teaches the method of claim 7, wherein said content delivery system comprises a network endpoint content delivery system (Col. 1, L. 35-65).

7. Regarding claim 9, Haggard teaches the method of claim 3, wherein said plurality of processing engines comprise a system management engine; and wherein said method comprises using said system management engine to perform said monitoring, logging, and analyzing (Col. 2, L. 30-60; and Col. 5, L. 5-20, L. 60-Col. 6, L. 36; and Col. 7, L. 15-45).

8. Regarding claim 10, Haggard teaches the method of claim 9, wherein said logging comprises communicating said monitored resource utilization information to a history repository coupled to said system management engine and maintaining said monitored resource utilization information in said history repository; and wherein said method further comprises retrieving said logged resource utilization information from said history repository prior to performing said analyzing (ex. collecting monitored resource utilization information in the database is equivalent to maintaining the monitored resource utilization information in the database) (Col. 2, L. 30-60; and Col. 5, L. 60-Col. 6, L. 36; and Col. 7, L. 15-65).

9. Regarding claim 11, Haggard teaches the method of claim 10, wherein said history repository is implemented on a device external to said information management system (ex. the database is the history repository, and it can be at a remote location) (Col. 6, L. 29-36; and Col. 7, L. 21-30; and figure 4).

10. Regarding claim 12, Haggard teaches the method of claim 1, wherein said analyzing comprises performing at least one of a peak time period analysis, a short term forecast analysis, a long term trend analysis, a load balancing analysis, a bottleneck analysis, or a combination thereof (Col. 7, L. 21-Col. 8, L. 58).

11. Regarding claim 13, Haggard teaches the method of claim 3, wherein said method further comprises automatically reallocating workload between said processing engines based at least in part on said analysis of said logged resource utilization information (Col. 5, L. 5-41).

12. Regarding claim 14, Haggard teaches the method of claim 1, wherein said method further comprises dynamically managing system resources based on the results of said analyzing (Col. 7, L. 56-Col. 8, L. 57).

13. Regarding claim 15, Haggard teaches

A method of analyzing resource utilization in an information management system, comprising:

monitoring resource utilization information obtained from said information management system (Col. 2, L. 30-44);

logging said monitored resource utilization information (Col. 2, L. 50-60; and Col. 6, L. 5-10; and Col. 7, L. 15-30); and

analyzing said logged resource utilization information (Col. 2, L. 50-60; and Col. 7, L. 21-33);

wherein said information management system comprises a plurality of individual processing engines coupled together by a distributed interconnect; wherein said resource utilization information is obtained from one ox more of said individual

processing engines; and wherein said method comprises monitoring and logging said resource utilization information on an individual processing engine basis (Col. 2, L. 30-60; and Col. 5, L. 5-20, L. 60-Col. 6, L. 36; and Col. 7, L. 15-45).

14. Regarding claim 24, Haggard teaches specifying or sizing additional subsystem or system equipment based at least in part on the results of one or more of said analyses (Col. 8, L. 40-50).

15. Regarding claim 25, Haggard teaches identifying a condition of overutilization for at least one of said processing engines based on the results of at least one of said analyses; and addressing said identified condition of overutilization in response to said identification by at least one of downloading additional software functionality onto said overutilized processing engine, transferring workload from said overutilized processing engine to a hot spare processing engine, issuing a notification to add additional processing engine hardware, or a combination thereof (ex. the number of resource utilizations exceeds an average/ threshold is a condition of overutilization; and upgrading components is equivalent to downloading additional software functionality; and color (red/yellow/etc.) action is used as a notification) (Col. 7, L. 56-Col. 8, L. 57; and Col. 5, L. 31-41).

16. Regarding claim 26, Haggard teaches identifying an adverse workload condition for at least one of said processing engines based on the results of at least one of

said analyses; and generating an alarm in response to said identification of said adverse workload condition (ex. using color (red/yellow/etc.) action to alert on exception reports is as generating an alarm) (Col. 7, L. 44-Col. 8, L. 57).

17. Regarding claim 27, Haggard teaches identifying an adverse workload condition for at least one of said processing engines based on the results of at least one of said analyses; and addressing said adverse workload condition by automatically reallocating workload between two or more of said processing engines based at least in part on said analysis of said logged resource utilization information (Col. 7, L. 44-Col. 8, L. 57; and Col. 5, L. 5-41).

18. Regarding claim 28, Haggard teaches forecasting a future adverse workload condition for at least one of said processing engines based on the results of at least one of said analyses (Col. 2, L. 1-10; and Col. 7, L. 44-Col. 8, L. 57).

19. Regarding claim 29, Haggard teaches providing a user with at least one suggested information management system reconfiguration to address said forecasted adverse workload condition, allowing a user to reconfigure said information management system to address said forecasted adverse workload condition, allowing a user to purchase additional information system equipment to address said forecasted adverse workload condition, or a combination thereof (ex. the new equipment and upgrades are requested is equivalent to purchase

equipment to address the forecasted adverse workload condition) (Col. 2, L. 1-10; and Col. 7, L. 44-Col. 8, L. 57).

20. Regarding claim 31, Haggard teaches a method of analyzing resource utilization in a network connectable information management system that includes a system management processing engine coupled to at least one other processing engine by a distributed interconnect, said method comprising:

monitoring resource utilization information obtained across said distributed interconnect from said at least one other processing engine, wherein said monitoring is performed using a resource utilization monitor implemented on said system management processing engine (Col. 1, L. 65-Col. 2, L. 10, and L. 30-44);

logging said monitored resource utilization information by communicating said monitored resource utilization information to a history repository, wherein said logging is performed using a resource utilization logger implemented on said system management processing engine and wherein said history repository is implemented on a server coupled to said system management processing engine (Col. 2, L. 50-60; and Col. 6, L. 5-36; and Col. 7, L. 15-30);

maintaining said logged resource utilization information on said history repository (ex. collecting monitored resource utilization information in the database is equivalent to maintaining the monitored resource utilization information in the database) (Col. 2, L. 30-60; and Col. 5, L. 60-Col. 6, L. 36; and Col. 7, L. 15-65);

retrieving said logged resource utilization information from said history repository (Col. 7, L. 15-67);

and

analyzing said retrieved resource utilization information, wherein said retrieving and said analyzing is performed using a logging and analysis manager implemented on said system management processing engine (Col. 2, L. 50-60; and Col. 7, L. 21-Col. 8, L. 25);

wherein said resource utilization information comprises at least one of memory utilization for said at least one other processing engine, CPU utilization for said at least one other processing engine, IOPS utilization for said at least one other processing engine, or a combination thereof (Col. 8, L. 8-15).

21. Regarding claim 32, Haggard teaches a plurality of other individual processing engines coupled to said system management processing engine by said distributed interconnect; wherein said resource utilization information is obtained from two or more of said plurality of individual processing engines; and wherein said steps of monitoring, logging, maintaining, retrieving and analyzing said resource utilization information are performed on an individual processing engine basis (ex. collecting monitored resource utilization information in the database is equivalent to maintaining the monitored resource utilization information in the database) (Col. 2, L. 30-60; and Col. 5, L. 5-20, L. 60-Col. 6, L. 36; and Col. 7, L. 15-67).

22. Regarding claim 33, Haggard teaches monitoring comprises using said resource utilization monitor to periodically poll each of said plurality of other processing engines across said distributed interconnect and to collect resource utilization information communicated from each of said plurality of other processing engines across said distributed interconnect in response to said periodic polling (Col. 2, L. 30-60; and Col. 6, L. 4-35; and Col. 7, L. 21-Col. 8, L. 25).

23. Regarding claim 34, Haggard teaches monitoring comprises using said resource utilization monitor to collect resource utilization information communicated in an asynchronous manner from each of said plurality of other processing engines to said resource utilization monitor across said distributed interconnect (Col. 2, L. 30-60; and Col. 5, L. 5-20; and Col. 6, L. 4-35; and Col. 7, L. 21-Col. 8, L. 25).

24. Regarding claim 35, Haggard teaches steps of retrieving and analyzing are initiated by user input into a user interface module implemented by said logging and analysis manager (Col. 6, L. 35-45; and Col. 7, L. 21-67).

25. Regarding claim 36, Haggard teaches monitoring comprises using said resource utilization monitor to periodically poll each of said plurality of other processing engines across said distributed interconnect and to collect resource utilization information communicated from each of said plurality of other processing engines

across said distributed interconnect in response to said periodic polling; wherein said steps of retrieving and analyzing are initiated by user input into a user interface module implemented by said logging and analysis manager; wherein said retrieving is performed using a data retrieval module implemented by said logging and analysis manager; and wherein said analyzing is performed using a data analysis module implemented by said logging and analysis manager (Col. 2, L. 30-60; and Col. 6, L. 4-45; and Col. 7, L. 15-Col. 8, L. 25).

26. Regarding claim 42, Haggard teaches a method of analyzing resource utilization in a network connectable content delivery system that includes a system management processing engine coupled to a plurality of other processing engines by a distributed interconnect, said method comprising:

monitoring resource utilization information obtained across said distributed interconnect from said plurality of other processing engines, wherein said monitoring is performed using a resource utilization monitor implemented on said system management processing engine (Col. 1, L. 65-Col. 2, L. 10, and L. 30-44);

logging said monitored resource utilization information by communicating said monitored resource utilization information to a history repository, wherein said logging is performed using a resource utilization logger implemented on said system management processing engine and wherein said history repository is implemented on a server coupled to said system management processing engine (Col. 2, L. 50-60; and Col. 6, L. 5-36; and Col. 7, L. 15-30);

maintaining said logged resource utilization information on said history repository (ex. collecting monitored resource utilization information in the database is equivalent to maintaining the monitored resource utilization information in the database) (Col. 2, L. 30-60; and Col. 5, L. 60-Col. 6, L. 36; and Col. 7, L. 15-65);

retrieving said logged resource utilization information from said history repository (Col. 7, L. 15-67); and

analyzing said retrieved resource utilization information, wherein said retrieving and said analyzing is performed using a logging and analysis manager implemented on said system management processing engine (Col. 2, L. 50-60; and Col. 7, L. 21-Col. 8, L. 25);

wherein said resource utilization information is obtained from two or more of said plurality of other processing engines; and wherein said steps of monitoring, logging, maintaining, retrieving and analyzing said resource utilization information are performed on an individual processing engine basis (ex. collecting monitored resource utilization information in the database is equivalent to maintaining the monitored resource utilization information in the database) (Col. 2, L. 30-60; and Col. 5, L. 5-20, L. 60-Col. 6, L. 36; and Col. 7, L. 15-67); and

wherein said resource utilization information comprises at least one of memory utilization for said two or more other processing engines, CPU utilization for said two or more other processing engines, IOPS utilization for said two or more other processing engines, or a combination thereof (Col. 5, L. 5-20; and Col. 8, L. 8-15; and Col. 5, L. 5-15).

27. Regarding claim 44, Haggard teaches plurality of processing engines comprise a network interface engine, a storage processing engine and an application processing engine (ex. the network provides a user interface which inherits a network interface engine; a storage capacity inherits a storage processing engine; and application programming interface inherits an application processing engine) (Col. 2, L. 50-67; and Col. 6, L. 35-45; and Col. 7, L. 45-67).

28. Regarding claim 45, Haggard teaches analyzing comprises performing a peak time period analysis (ex. daily is a period) (Col. 7, L. 45-Col. 8, L. 58).

29. Regarding claim 46, Haggard teaches analyzing comprises performing a short term forecast analysis (ex. weekly is a short term) (Col. 2, L. 1-10; and Col. 7, L. 45-Col. 8, L. 58).

30. Regarding claim 47, Haggard teaches analyzing comprises performing a long term trend analysis (ex. monthly is a long term trend) (Col. 7, L. 45-Col. 8, L. 58).

31. Regarding claim 48, Haggard teaches analyzing comprises performing a load balancing analysis (ex. if having high utilization, which exceeds the threshold, the components are in need of the upgrade; or if having low utilization, the

components become candidates for consolidation and possible removal. This is performing a load balancing) (Col. 7, L. 45-Col. 8, L. 58).

32. Regarding claim 49, Haggard teaches analyzing comprises performing a bottleneck analysis (ex. the number of tasks queued to run on an AIX machine exceeds an average of five tasks which is performing a bottleneck) (Col. 7, L. 45-Col. 8, L. 58).

33. Regarding claim 54, Haggard teaches identified adverse workload condition comprises at least one of an identified bottleneck, an identified unbalanced workload, an identified condition of overutilization, or a combination thereof (Col. 7, L. 21-Col. 8, L. 58).

34. Regarding claim 57, Haggard teaches allowing a user to reconfigure said information management system to address said forecasted adverse workload condition by user input into a user interface module implemented by said logging and analysis manager (Col. 2, L. 1-10; and Col. 6, L. 35-55; and Col. 7, L. 44-Col. 8, L. 57).

35. Regarding claim 58, Haggard teaches using said user interface module to provide a user with at least one suggested information management system

reconfiguration to address said forecasted adverse workload condition (Col. 2, L. 1-10; and Col. 6, L. 35-55; and Col. 7, L. 44-Col. 8, L. 57).

36. Regarding claim 59, Haggard teaches allowing a user to purchase additional information system equipment to address said forecasted adverse workload condition by user input into said user interface module (ex. the new equipment and upgrades are requested is equivalent to purchase equipment to address the forecasted adverse workload condition) (Col. 2, L. 1-10; and Col. 6, L. 35-55; and Col. 7, L. 44-Col. 8, L. 57).

37. Regarding claim 62, Haggard teaches information management system comprises a system management processing engine and at least one other processing engine coupled to said system management processing engine by said distributed interconnect; wherein said resource utilization information comprises resource utilization obtained from said at least one other processing engine; wherein each of said resource utilization monitor, said resource utilization logger, and said logging and analysis manager are implemented on said system management processing engine (Col. 2, L. 30-60; and Col. 5, L. 5-20, L. 60-Col. 6, L. 36; and Col. 7, L. 15-67).

38. Regarding claim 63, Haggard teaches resource utilization logger is capable of logging said monitored resource utilization information by communicating said

monitored resource utilization information to a history repository capable of maintaining said logged resource utilization information and being implemented on a server coupled to said system management processing engine; and wherein said logging and analysis manager is capable of retrieving said logged resource utilization information from said history repository and is further capable of analyzing said retrieved resource utilization information (Col. 2, L. 30-60; and Col. 5, L. 60-Col. 6, L. 36; and Col. 7, L. 15-Col. 8, L. 25).

39. Regarding claim 76, Haggard teaches a resource utilization analysis system for analyzing resource utilization in a network connectable content delivery system that includes a system management processing engine coupled to a plurality of other processing engines by a distributed interconnect, said resource utilization analysis system comprising:

a resource utilization monitor implemented on said system management processing engine and capable of monitoring resource utilization information on an individual processing engine basis that is obtained across said distributed interconnect from two or more of said plurality of other processing engines (Col. 1, L. 65-Col. 2, L. 10, and L. 30-44);

a resource utilization logger implemented on said system management processing engine and capable of logging said monitored resource utilization information on an individual processing engine basis by communicating said monitored resource utilization information to a history repository capable of

maintaining said logged resource utilization information on an individual processing engine basis, said history repository being implemented on a server coupled to said system management processing engine (Col. 2, L. 50-60; and Col. 6, L. 5-36; and Col. 7, L. 15-30); and

a logging and analysis manager implemented on said system management processing engine and capable of retrieving said logged resource utilization information on an individual processing engine basis from said history repository and, capable of analyzing said logged resource utilization information on an individual processing engine basis (Col. 2, L. 50-60; and Col. 7, L. 15-Col. 8, L. 25);

wherein said resource utilization information comprises at least one of memory utilization for said two or more other processing engines, CPU utilization for said two or more other processing engines, IOPS utilization for said two or more other processing engines, or a combination thereof (Col. 5, L. 5-20; and Col. 8, L. 8-15; and Col. 5, L. 5-15).

40. Claim 16 has similar limitations as claim 2. Therefore, the supporting rationale of the rejection to claim 2 applies equally as well to claim 16.

41. Claims 18,39 have similar limitations as claim 7. Therefore, the supporting rationale of the rejection to claim 7 applies equally as well to claims 18,39.

42. Claims 19,40 have similar limitations as claim 8. Therefore, the supporting rationale of the rejection to claim 8 applies equally as well to claims 19,40.

43. Claims 20-23 have similar limitations as claims 9-12. Therefore, the supporting rationale of the rejection to claims 9-12 applies equally as well to claims 20-23.

44. Claim 50 has similar limitations as claim 12. Therefore, the supporting rationale of the rejection to claim 12 applies equally as well to claim 50.

45. Claims 30,41,60 have similar limitations as claim 14. Therefore, the supporting rationale of the rejection to claim 14 applies equally as well to claims 30,41,60.

46. Claims 51-53, and 55-56 have similar limitations as claims 24-26, and 27-28. Therefore, the supporting rationale of the rejection to claims 24-26, and 27-28 applies equally as well to claims 51-53, and 55-56.

47. Claims 61,64,70 have similar limitations as claims 1,16,55, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claims 1,16,55 applies equally as well to claims 61,64,70.

48. Claims 65-69 have similar limitations as claims 32-36, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claims 32-36 applies equally as well to claims 65-69.

49. Claims 73-74, 75 have similar limitations as claims 7-8, 14, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claims 7-8, 14 applies equally as well to claims 73-74, 75.

50. Claims 78-84 have similar limitations as claims 44-50, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claims 44-50 applies equally as well to claims 78-84.

51. Claims 85-87 and 89-94 have similar limitations as claims 51-53 and 55-60, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claims 51-53 and 55-60 applies equally as well to claims 85-87 and 89-94.

52. Claim 88 has similar limitations as claim 54, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claim 54 applies equally as well to claim 88.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

53. Claims 4-6,17,37-38,43,71-72,77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haggard et al. (Haggard) (6,148,335) as applied to claim 1,15,31,42,61, and 76 above, and further in view of Porras et al. (Porras) (US 6,321,338 B1).

54. Regarding claim 4, Haggard teaches plurality of processing engines communicate as client and server in a client-server network (Col. 1, L. 5-35; and Col. 5, L. 5-20).

Haggard fails to teach plurality of processing engines communicate as peers in a peer to peer environment. However, Porras, in the same field of endeavor, teaches plurality of processing engines communicate as peers in a peer to peer environment (Col. 4, L. 5-15).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Porras's teachings of plurality of processing engines communicate as peers in a peer to peer environment, with the teachings of Haggard in the performance/capacity management framework over many servers, for the purpose of providing "an administrator to accurately determine usage and capacity across all of the servers in a network" as stated by Haggard in (Col. 2, L. 31-35).

55. Regarding claim 5, Haggard teaches the network has several servers, which are interconnected either directly to each other or indirectly through one of the other server (Col. 1, L. 15-25).

Haggard fails to teach the distributed interconnect comprises a switch fabric. However, Porras, in the same field of endeavor, teaches the distributed interconnect comprises a switch fabric (ex. a router is equivalent to a switch which is used to connect nodes) (Col. 3, L. 41-50).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Porras's teachings of the distributed interconnect comprises a switch fabric, with the teachings of Haggard

in the performance/capacity management framework over many servers, for the purpose of providing "an administrator to accurately determine usage and capacity across all of the servers in a network" as stated by Haggard in (Col. 2, L. 31-35).

56. Regarding claim 6, Haggard teaches the network has several servers, which are interconnected either directly to each other or indirectly through one of the other server (Col. 1, L. 15-25).

Haggard fails to teach the distributed interconnect comprises a virtual distributed interconnect. However, Porras, in the same field of endeavor, teaches the virtual distributed interconnect (ex. a virtual private network inherits the virtual distributed interconnect) (Col. 3, L. 41-50).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Porras's teachings of the virtual distributed interconnect, with the teachings of Haggard in the performance/capacity management framework over many servers, for the purpose of providing "an administrator to accurately determine usage and capacity across all of the servers in a network" as stated by Haggard in (Col. 2, L. 31-35).

57. Claims 17,37,43 have similar limitations as claim 5. Therefore, the supporting rationale of the rejection to claim 5 applies equally as well to claims 17,37,43.

58. Claims 71,77 have similar limitations as claim 5, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claim 5 applies equally as well to claims 71,77.

59. Claim 38 has similar limitations as claim 6. Therefore, the supporting rationale of the rejection to claim 6 applies equally as well to claim 38.

60. Claim 72 has similar limitations as claim 6, but in the system form rather than method form. Therefore, the supporting rationale of the rejection to claim 6 applies equally as well to claims 72.

- The prior arts are not relied on in the rejection:
  - Datta et al. (US 6,209,033 B1)
  - Sweet et al. (US 6,836,800 B1)
  - Scarpelli et al. (US 6,816,898 B1)
  - Ram (US 6,553,419 B1)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU N. NGUYEN whose telephone number is (571) 272-4242. The examiner can normally be reached on Monday-Friday from 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VALENCIA M. WALLACE can be reached on (571) 272-6159. The fax

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Minh-Chau Nguyen
Art Unit: 2145

M.N

Patrice Winder

PATRICE WINDER
PRIMARY EXAMINER